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Atsushi Kakemura

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EXAMINER

RICHARDSON, THOMAS W

ART UNIT

PAPER NUMBER

4121

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/790,798

Applicant(s)

KAKEMURA, ATSUSHI

Examiner

Thomas Richardson

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4121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 03 March 2004, 01 March 2006.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

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DETAILED ACTION

Claims 1-17 are pending for examination.

Claims 1-17 are rejected.

Drawings

1. The disclosure is objected to because of the following informalities:
2. Page 9, line 6 contains a reference to "wireless LAN device 130" which appears in Figure 2 as "wireless LAN device 13."
3. Page 15, line 16 contains a reference to "icon 403" which appears in Figure 6 as reference number 402.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 4, 5, 7, 10, 11, and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by US 2002/0112026, Fridman et al.
6. As per claim 1, Fridman teaches an information processing apparatus (Figure 1, where the system for displaying information on mobile signs is disclosed) comprising:

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means capable of wirelessly communicating with a plurality of external devices which display received image data (Figure 1, where the wireless system 134 contains a transmit and receive function which can communicate with mobile units 104);

means for simultaneously transmitting the image data to the plurality of external devices by using the means capable of wirelessly communicating (page 6, paragraph [0096], where the system contains a wireless system); and

means for updating the image data transmitted by the means for simultaneously transmitting the image data (page 7, paragraph [0109], where the display message updates the display).

7. As per claim 4, Fridman teaches the information processing apparatus according to claim 1, wherein the means for simultaneously transmitting the image data transmits image data having the same content as that of currently processed image data which is internally displayed to at least one external device (page 24, paragraph [0292], where the central server synchronizes multiple displays, which display the processed data contained in the central server memory, such as Display Msgs 1-N (Figure 1, 132A-N)).

8. As per claim 5, Fridman teaches the information processing apparatus according to claim 1, wherein the means for simultaneously transmitting the image data transmits image data divided into a plurality of areas for a multi screen to the plurality of external devices (page 6, paragraph [0098], where a screen image is broken into several parts to be displayed as a single image by multiple displays).

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9. As per claim 7, Fridman teaches the information processing apparatus according to claim 1, wherein each of the external devices is a projector device configured to project an optical image corresponding to received image data onto a projection screen (page 6, paragraph [0098], where the display may be any display, including a projection display).

10. As per claim 10, Fridman teaches the information processing apparatus according to claim 1, wherein the means for simultaneously transmitting the image data includes means for transmitting the same image data to the plurality of external devices (page 6, paragraph [0099], where the same image is displayed on multiple displays).

11. As per claim 11, Fridman teaches the information processing apparatus according to claim 1, wherein the means for simultaneously transmitting the image data includes means for transmitting the different image data to the plurality of external devices (page 6, paragraph [0098], where a screen image is broken into several parts to be displayed as a single image by multiple displays).

12. As per claim 12, Fridman teaches a computer program product configured to store program instructions for execution on a computer system enabling the computer system to perform:

transmitting image data to a plurality of external devices capable of performing wireless communication which exist on the periphery (page 7, paragraph [0106], where the message is received by a mobile unit); and

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updating the image data which is transmitted to the external devices (page 7, paragraph [0110], where the message is displayed on the mobile display in accordance with the received message).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

15. Claims 2, 3, 6, 8, 9, 13, 14, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2002/0112026, Fridman as applied to claims 1, 7, and 12 above, and further in view of US 2002/0161740, Nakamura et al.

16. As per claim 2, Fridman teaches the information processing apparatus according to claim 1, wherein the means capable of wirelessly communicating comprises:

means for detecting all external devices which can perform wireless communication from the plurality of external devices existing on the periphery as

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detection targets (page 9, paragraph [0124], where the central server detects and locates mobile units with the locator signals); and means for establishing communication with each of the external devices selected by the user interface (page 6, paragraph [0096], where the system contains a wireless communication system).

Fridman teaches an automated system that does not have a user interface. Nakamura teaches a system with multiple input and output devices that comprises:

a user interface which displays each of the external devices detected by the means for detecting all external devices so as to be capable of being selected (page 9, paragraph [0115], where an interface like that shown in Figure 4 is also used with display devices).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include the user interface as taught by Nakamura in the system of Fridman. A user interface allows a user to control a device at will, including changing the configurations, settings, and displays. Having a user interface also allows a user to change control settings and relieve the load of the central server (Nakamura, abstract). This would be beneficial in Fridman's system because it would allow a user to make adjustments to devices or displays at will, rather than relying on a preprogrammed central server.

17. As per claim 3, Fridman teaches the information processing apparatus according to claim 1.

Nakamura teaches a system wherein the means for simultaneously transmitting the image data transmits image data of an application program which operates in the

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background to at least one external device (page 9, paragraph [0115], where the management server sends data for configuration of devices).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include the configuration method of Nakamura in the system of Fridman. The method allows the user to edit the system configuration in any way, letting the user change things such as brightness, volume, and other administrative functions (Nakamura, page 8, paragraph [0106]). This is beneficial in any display device, especially that of Fridman, because it allows the user to change the device configurations with changing conditions, such as weather or location.

18. As per claim 6, Fridman teaches the information processing apparatus according to claim 1.

Nakamura teaches a system wherein the means for simultaneously transmitting the image data transmits image data of each of a plurality of application programs to the plurality of external devices (page 9, paragraph [0115], where the management server sends data for configuration of devices, including settings, resolutions, and languages). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the configuration method of Nakamura in the system of Fridman. The method allows the user to edit multiple system configuration in any way, letting the user change things such as brightness, volume, and other administrative functions (Nakamura, page 8, paragraph [0106]). This is beneficial in any display device, especially that of Fridman, because it allows the user to change the device configurations with changing conditions, such as weather or location.

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19. As per claim 8, Fridman teaches the information processing apparatus according to claim 7, wherein the means capable of wirelessly communicating comprises:

means for detecting each of all the projector devices existing in a range to which a transmitted wireless signal can be supplied (page 9, paragraph [0124], where the locator signal allows the central server to detect and locate projection devices); and

means performing communication connection with respect to each of the projector devices (page 6, paragraph [0096], where the system contains a wireless communication system),

wherein the means for simultaneously transmitting the image data transmits screen image data to each of the projector devices selected from the list by using a wireless signal (page 7, paragraph [0109], where the display message contains the image data to be displayed).

Fridman teaches an automated system that does not have a user interface. Nakamura teaches a system with multiple input and output devices that comprises:

means for displaying a list of the detected projector devices to each projector device so as to be capable of being selected (page 9, paragraph [0115], where the user interface lists the devices as shown in Figure 4); and

means performing communication connection with respect to each of the projector devices selected from the list (Figure 11, where all the devices are connected through the Local Area Network).

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It would have been obvious to one of ordinary skill in the art at the time of the invention to combine these two things. A user interface allows a user to control a device at will, including changing the configurations, settings, and displays. Having a user interface also allows a user to change control settings and relieve the load of the central server (Nakamura, abstract). This would be beneficial in Fridman's system because it would allow a user to make adjustments to devices or displays at will, rather than relying on a preprogrammed central server.

20. As per claim 9, the combination of Fridman and Nakamura teaches the information processing apparatus according to claim 8, further comprising a display device capable of displaying image data, and image data generated based on image data transmitted to the projector device is displayed in the display device (Fridman teaches this limitation. Page 6, paragraph [0098], where the display device shows the data that is transmitted to it).

21. As per claim 13, Fridman teaches the program according to claim 12, wherein said transmitting the image data includes:

detecting each of all projector devices existing in a range to which a transmitted wireless signal can be supplied as the plurality of external devices capable of performing wireless communication (page 9, paragraph [0124], where the locator signal allows the central server to detect and locate projection devices);
performing communication connection with respect to the projector device (; and

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acquiring image data which is transmitted to the projector device to which the communication has been established (page 7, paragraph [0105], where the central server sends a message containing data or a message ID).

Fridman teaches an automated system that does not have a user interface. Nakamura teaches a system with multiple input and output devices that comprises:

displaying a list of the detected projector devices to each of the projector devices so as to be capable of being selected (page 9, paragraph [0115], where the user interface lists the devices as shown in Figure 4);

performing communication connection with respect to the projector device selected from the list (Figure 11, where all the devices are connected through the Local Area Network).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine these two things. A user interface allows a user to control a device at will, including changing the configurations, settings, and displays. Having a user interface also allows a user to change control settings and relieve the load of the central server (Nakamura, abstract). This would be beneficial in Fridman's system because it would allow a user to make adjustments to devices or displays at will, rather than relying on a preprogrammed central server.

22. As per claim 14, the combination of Fridman and Nakamura teaches the program according to claim 13, wherein said acquiring the image data includes acquiring image data which is a base of currently processed image data which is internally displayed (Fridman teaches this limitation. Page 7, paragraph [0109], where the sent message

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contains an ID for displaying a message), and acquiring image data of an application program which operates in the background (Fridman teaches this limitation. Page 7, paragraph [0110], where the message is sent from the central server memory).

23. As per claim 15, the combination of Fridman and Nakamura teaches the program according to claim 13, wherein said acquiring the image data includes acquiring image data which is a base of currently processed image data which is internally displayed or image data for a multi screen obtained by dividing image data of an application program which operates in the background into a plurality of areas (Fridman teaches this limitation. Page 6, paragraph [0098], where multiple displays are used together to form and display one image).

24. As per claim 16, the combination of Fridman and Nakamura teaches the program according to claim 13, wherein said acquiring the image data includes acquiring image data of each of a plurality of application programs (Fridman teaches this limitation. Figure 1, also page 10, paragraph [0134], where the programming, billing, and location programs run and the data is processed by the server).

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 2002/0112026, Fridman et al and US 2002/0161740, Nakamura et al as applied to claim 13 above, and further in view of US 6 877 037, Adachi.

25. As per claim 17, the combination of Fridman and Nakamura teaches the program according to claim 13, wherein said updating the data includes devices selected from the list (Nakamura teaches this limitation. Figure 4, as well as page 9, paragraph [0115], where the system sends configuration information to the devices selected).

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The combination does not teach an automatic method of updating the image data.

Adachi teaches a system for updating data on a remote device wherein

said updating the image data which is transmitted to the external device includes periodically acquiring image data with respect to the image data transmitted to each of the projector devices, judging whether the acquired image data is updated image data by comparing the acquired image data with previously transmitted image data, and transmitting only image data which is determined as the updated image data (abstract).

It would have been obvious to one of ordinary skill in the art at the time of the invention to use this method of updating the image automatically in any system. Fridman's system would benefit from an update method Adachi teaches, as it would ensure that the most recent data is being displayed. Nakamura's system would also benefit from Adachi's method, as the user, through the interface, could selectively apply data updated, allowing different displays to have different versions of data.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 2007/0005809, Kobayashi et al teaches a network processing and display system.

US 7 103 834, Humpleman et al teaches a network display system with discovery and control applications.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas Richardson whose telephone number is (571) 270-5006. The examiner can normally be reached on Monday through Thursday, 8am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Taghi Arani can be reached on (571) 272-3787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TR


TAGHI ARANI
PRIMARY EXAMINER

10/24/07